# Applied Stochastic Processes and Control for Jump-Diffusions:

## Modeling, Analysis, and Computation

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## Post Publication Errata

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*Negative numbered lines imply lines counted up from the bottom, designated as line -1.*

- Page 1, line -5: Replace "**continuous-time stochastic processes**" by "**stochastic processes in continuous-time**"
- Page 190, line -6: Delete "dps".
- Page 290, Eq. (10.8), line -13: Insert "$S^2(t)$" before "$\partial^2 F''$" $\over \partial S^2$ so equation is

$$dV^*(t) = N_F^* \left( dF - \frac{\partial F}{\partial S} dS \right) = N_F^* \left( \frac{\partial F}{\partial t} + \frac{1}{2}\sigma^2 S^2(t) \frac{\partial^2 F}{\partial S^2} \right) dt$$

- Page 290, Eq. (10.11), line -3: Insert "$s^2$" before "$\partial^2 F''$" $\over \partial s^2$, changing all $S$"s to c$s$"s, so equation is

$$\frac{\partial F}{\partial t}(s,t) + \frac{1}{2}\sigma^2 s^2 \frac{\partial^2 F}{\partial s^2}(s,t) = r\left( F(s,t) - s\frac{\partial F}{\partial s}(s,t) \right).$$

- Page 291, line 1 to 5: Replace all occurrences of the stochastic variable "$S$" with the PDE variable "$s$".
- Page 313, Eq. (10.103), line 2 of eq.: Insert the missing argument "$Q_k$" of the sum "$\sum_{k=1}^{P(T)}$" in the exponent inside the max function, so the line of the equation is

$$\equiv e^{-rT}\mathrm{E}\left[ \max\left[ S_0 e^{(r-\lambda\mu_J-\sigma_d^2/2)T+\sigma_d W(T)+\sum_{k=1}^{P(T)} Q_k} - K, 0 \right] \right]$$

- Page 314, eq. unnumbered, line 14: Change the arguments of the functions $A$ and $B$ from "$S_0 e^{\widehat{\mathcal{S}}_k - \lambda\mu_J T}$" to "$\widehat{\mathcal{S}}_k$", so the line of the equation is

$$= \sum_{k=0}^{\infty} p_k(\lambda T)\mathrm{E}_{\widehat{\mathcal{S}}_k}\Big[ S_0 e^{\widehat{\mathcal{S}}_k - \lambda\mu_J T} A\Big(\widehat{\mathcal{S}}_k\Big) - \ K e^{-rT} B\Big(\widehat{\mathcal{S}}_k\Big) \Big],$$